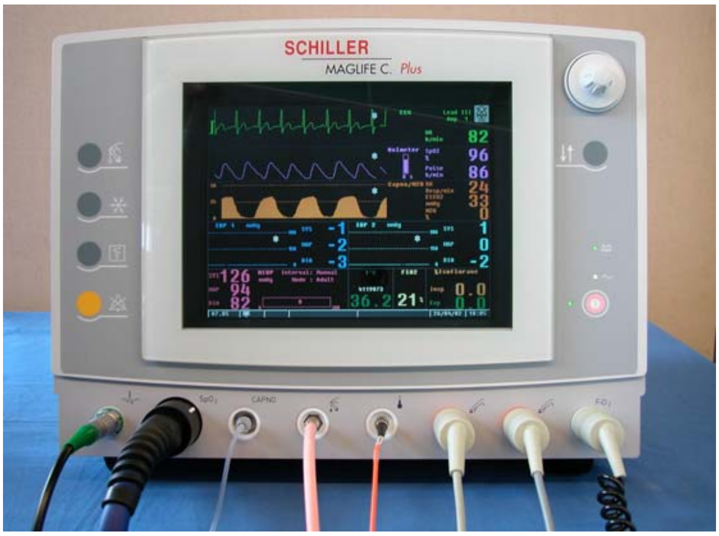
SCHILLER
MEDICAL S.A.S.

MAGLIFE C Plus / MAGSCREEN

User's Manual

Version 3.1 / February 2005


SCHILLER
MAGLIFE C. Plus
SpO2
CAPNO
FiO2

SCHILLER
MAGSCREEN

SCHILLER MEDICAL S.A.S
ZAE SUD
4, rue Louis Pasteur
BP 90050
F-67162 WISSEMBOURG CEDEX
Téléphone : +33 (0) 3 88 63 36 00
Télécopie : +33 (0) 3 88 94 12 82
Internet : http://www.schiller-medical.com
E.mail : info@schiller.fr

THE ART OF DIAGNOSTICS

Part No. W1404827

History of User’s Manual revisions

Revision 1: November 1998
Revision 2: August 2002
Revision 3: September 2003
Revision 3.1: February 2005

WARNING

This manual shall be deemed to be an integral part of the described unit.

Compliance with its contents is a preliminary condition for correct unit operation as well as for the safety of the patient and the operator.

The manufacturer may not be held responsible for the safety, reliability and specifications of the unit if:

- assembly, extensions, adjustments and repairs are not performed by the manufacturer or by personnel authorised by the manufacturer.

- the electrical installation of the premises does not comply with locally applicable requirements.

- the unit is not used in compliance with the instructions for use.

This manual describes the units as they are at the time of printing.

On request, the manufacturer shall supply circuit diagrams, lists of components, descriptions, calibrating instructions and any other information for use by qualified personnel of the user, in charge of repairing the parts of the unit which have been stated by the manufacturer to be "repairable". Such supply shall in no event constitute permission to modify or repair the units or approval of the same.

All rights reserved for the units, circuits, processes and appellations mentioned herein.

This unit is not designed for any type of use which is not specifically described in this manual. Such use may be hazardous.

CAUTION: Safety instructions inherent to MRI environments must be followed during any work on the unit (installation, operation, servicing etc.). All work on

MAGLIFE C Plus (e.g. servicing) shall be done imperatively outside the Faraday cage.

CAUTION: Strict compliance with the safety instructions relating to ECG measurement (see § 4.2) is an essential requirement. However, the potential risk of heating at the ECG electrodes cannot be ruled out completely (see article page 1226, Vol. 2 of "Proceedings of the S.M.R. and E.S.M.R.M.B. meeting held jointly, Nice, France, August 19-25, 1995: "Real Time Evaluation of ECG Electrode Heating during MRI at 1.5 T").

CAUTION: No system which hampers the blood flow (e.g. use of a cuff type sphygmomanometer) may be used on patients' limbs undergoing oxygen saturation measurement; such systems may disrupt the accurate determination of data.

CAUTION: Electrodes, probes and sensors must not touch other conductive parts or ground.

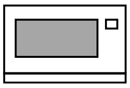
CAUTION: The ECG function must not be used on patients carrying a pacemaker : the monitoring function can be inhibited.

Don't defibrillate on electrodes and accessories. Place the defibrillation electrodes as far as possible from the other electrodes and accessories (ECG, etc...).

CAUTION: The monitor is adapted for the MRI configuration when it is started up. Any subsequent change in the MRI system can alter the performance of the **MAGLIFE C Plus** monitor. Please call SCHILLER.

WARNING: the line isolation monitor transients may resemble actual cardiac waveforms and thus inhibit heart rate alarms.

MAGLIFE C Plus / MAGSCREEN



This symbol indicates in the manual, that the text or paragraph which follows it relates to **MAGLIFE C Plus**

This symbol indicates in the manual, that the text or paragraph which follows it relates to **MAGSCREEN**

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2. REFERENCES AND DESCRIPTION OF DISPLAY AND CONTROLS

2.1. MAGLIFE C Plus FRONT

(see photo page 99)

(1) Main unit ON/OFF switch.

(2) Unit ON indicator.

(3) Indicator showing that the unit is connected to the mains.

(4) Indicator showing that the battery is being charged.

(5) Key for displaying and accessing the main menu or quitting a menu from any location.

(6) Control knob for menu selection.

(7) Waveform, parameter, menu and message display screen.

(8) Key for starting and stopping blood pressure measurement via a cuff.

(9) Key for starting and stopping the freeze function for all physiological waveforms.

(9') Key for starting a recorder sequence.

(10) Key for disabling and enabling audible alarms for 2 minutes (physiological and technical alarms).

(11) Connector for the fiber optic ECG sensor.

(12) Connector for the fiber optic SpO2 sensor.

(13) Connector for the aspiration tube for CO2/N2O and anaesthetic agents.

(14) Connector for the NIBP cuff.

(15) Connector for the fiber optic temperature probe.

(16) Connector for the 1st invasive blood pressure sensor.

(17) Connector for the 2nd invasive blood pressure sensor.

(18) Connector for the inspired oxygen fraction (FiO2) sensor.

2. REFERENCES AND DESCRIPTION OF DISPLAY AND CONTROLS

2.2. MAGLIFE C Plus REAR

(see photo page 100 and 101)

(19) Mains switch.

(20) Mains socket.

(21) Location of water trap for CO2/N2O and Agents functions.

(22) Exhaust for CO2/N2O and Anesthetic Agents. Exhaust 1 is used during calibration mode and Exhaust 2 is used during monitoring mode, and are used for the purpose of recovering gases from the CO2/N2O and Anesthetic Agent monitoring system.

Warning : The two exhaust ports must never be linked together using a “ T ”. This can bring erroneous indications for halogen agents calibration.

(23) CO2/N2O and Agents water trap inlet.

(24) CO2/N2O and Agents filters connection.

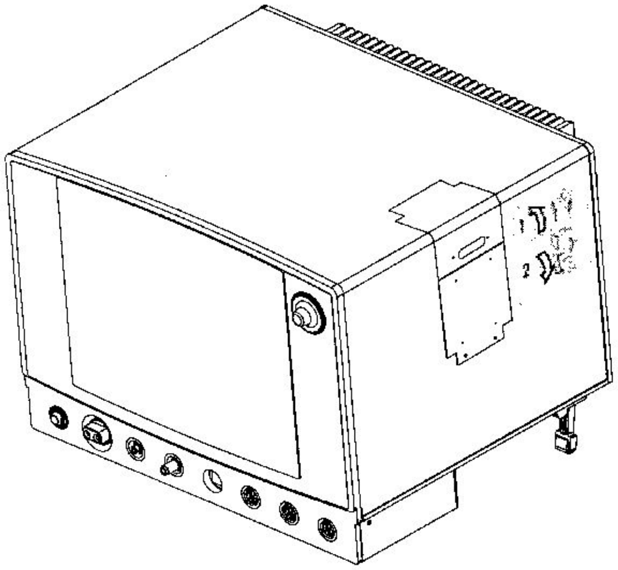
(25) Connection for the calibrating cylinder for the CO2/N2O and anaesthetic agents.

(26) Identication label.

(40) ECG optical signal output for MRI gating/triggering purpose.

(41) Optical connector for link to MAGSCREEN.

2.3. MAGLIFE C Plus RIGHT SIDE VIEW



Thermal strip chart printer (optionnal) with an internal paper spool. Provides a permanent record of patient's vital signs, waveforms and trended information. Refer to section 4.14.

2. REFERENCES AND DESCRIPTION OF DISPLAY AND CONTROLS

2.4. MAGSCREEN FRONT

(see photo page 102)

(27) Device On indicator.

(28) Key for displaying and accessing the main menu or quitting a menu from any location (when **MAGLIFE C Plus** is controlled by **MAGSCREEN**).

(29) Control knob for remote menu selection.

(30) Waveform, parameter, menu and message display screen.

(31) Key for starting or stopping blood pressure measurement by means of a cuff .

(32) Remote starting and stopping the freeze function of all physiological waveforms.

(33) Key for starting or stopping printing (if recorder option installed).

(34) Key for enabling physiological and technical audio alarms or disabling them for 2 minutes.

2.5. MAGSCREEN REAR

(see photo page 103)

(35) Identification label.

(36) Loudspeaker output.

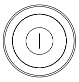
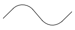
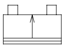
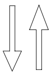
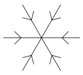
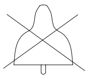
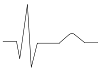
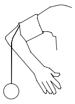
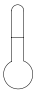
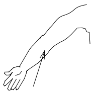
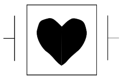
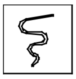
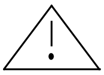
(37) Optical connector for connecting to MAGFILE.

(38) DC Power input.

(39) Optical connector for connecting to **MAGLIFE C Plus**

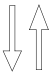
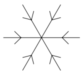
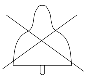
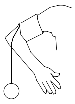
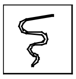
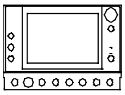
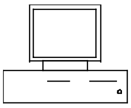
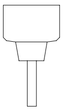
3. IDENTIFICATION OF UNIT SYMBOLS

3.1. MAGLIFE C Plus SYMBOLS

	Main unit On/Off button
	Mains on
	Battery being charged
	Access to main menu or exiting any menu
	Trace freeze
	2-minutes sound alarm disabling
	Electrocardiogram
	Non Invasive Blood Pressure
	Temperature
	Invasive Blood Pressure
	CF type device protected against defibrillation shock (device designed for direct applications on heart)
	Print
	Attention! Refer to the operating manual of this device for instructions!

3. IDENTIFICATION OF UNIT SYMBOLS

3.2. MAGSCREEN SYMBOLS

⎓	Power on
	Entering the main menu or quitting any menu
	Trace freeze function
	Two-minute alarm disable function
	Non invasive blood pressure
	Print
	Connection with **MAGLIFE C Plus**
	Connection with MAGFILE
	Power input connector